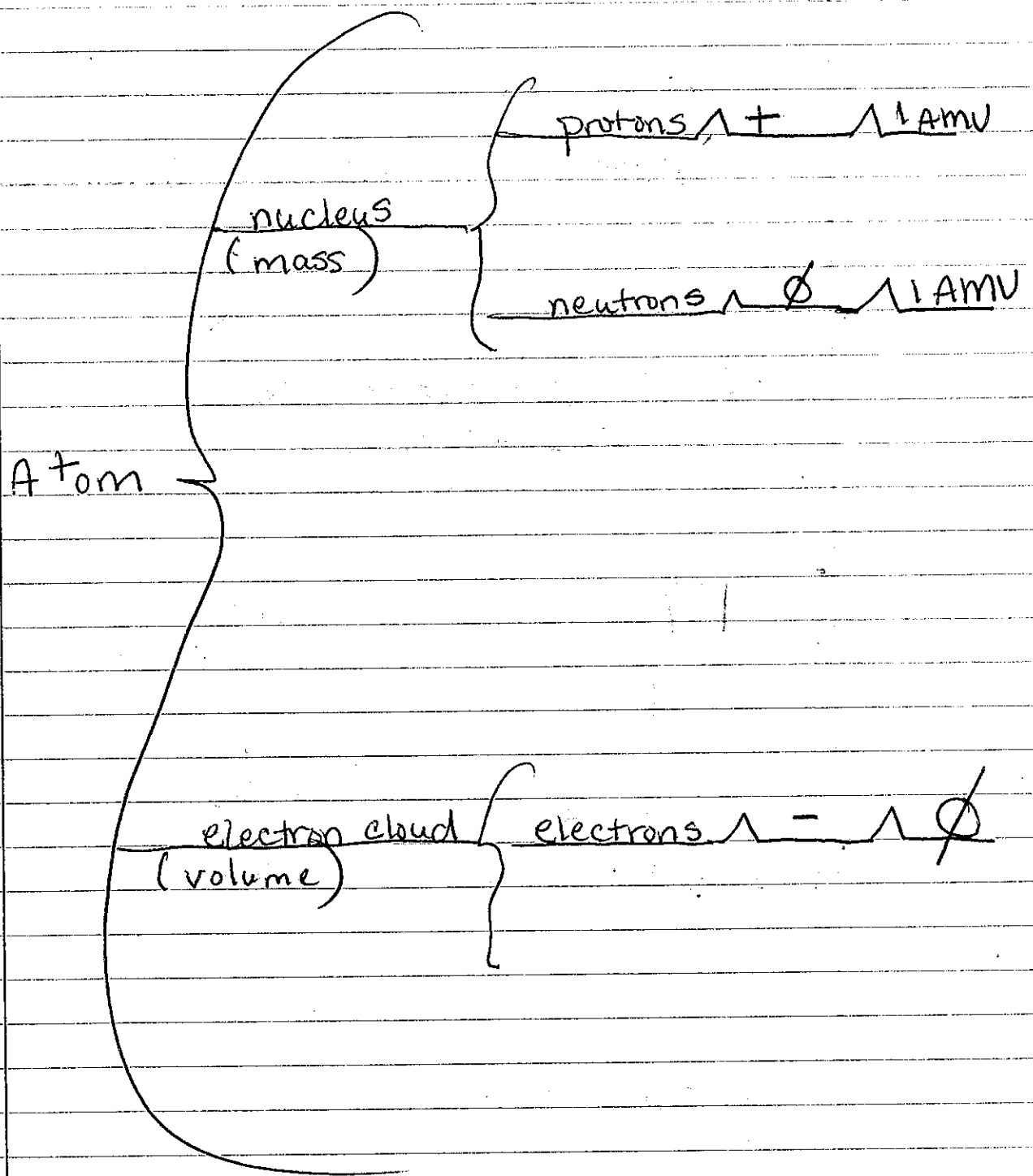


8.5A - The student is expected to describe the structure of atoms, including the masses, electrical charges, & locations of protons, neutrons, and electrons



47
32
19

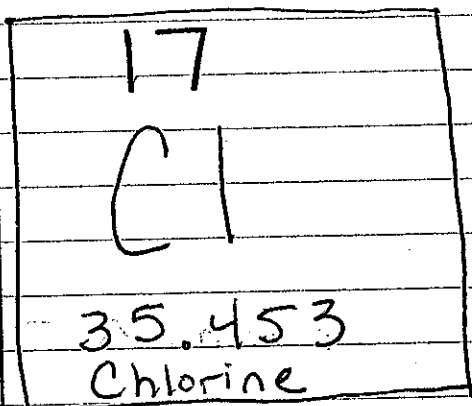
APE MAN

APE

$$\text{Atomic \#} = \text{Protons \#} = \text{Electron \#}$$

MAN

$$\begin{array}{r} \text{mass \# (rounded)} \\ - \text{Atomic \#} \\ \hline \text{Neutrons \#} \end{array}$$



APE

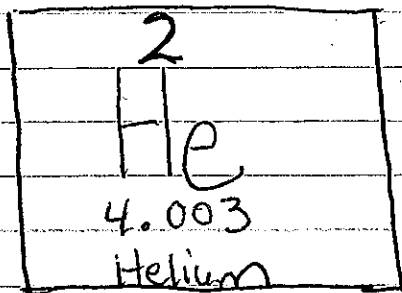
$$17 = 17p^+ = 17e^-$$

MAN

$$\begin{array}{r} 35 \\ - 17 \\ \hline 18 \text{ neutrons} \end{array}$$

isotope - different versions of an atom

Helium



APE MAN

$$2 = 2p^+ = 2e^-$$

$$\begin{array}{r} 4 \\ - 2 \\ \hline 2 \text{ neutrons} \end{array}$$